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Docket No.: 046080-0033 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of	:	Customer Number: 20277
Nobuhiro MISHIMA, et al.	:	Confirmation Number: 6059
Application No.: 09/585,339	:	Tech Center Art Unit: 2624
Filed: June 02, 2000	:	Examiner: James A. Thompson

For: IMAGE FORMING APPARATUS, POWER SUPPLY APPARATUS, AND METHOD OF SUPPLYING POWER

RESPONSE TO ORDER DATED APRIL 30, 2007

The Board of Patent Appeals and Interferences found that the Appeal Brief filed April 20, 2006 was non-compliant because the summary of the claimed subject matter section of the Brief did not address all of the independent claims in the application. The Board issued an Order regarding the non-compliance and gave Applicant 30 days to correct the Brief. Attached to this response is a Substitute Appeal Brief, which is now believed to comport with new rule 37 C.F.R. § 41.37(c)(1)(v).

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account and please credit any excess fees to such deposit account.

Respectfully submitted,
McDERMOTT WILL & EMERY LLP

Cameron K. Weiffenbach
Registration No. 44,488

600 13th Street, N.W.
Washington, DC 20005-3096
Phone: 202.756.8000 CKW:ckw
Facsimile: 202.756.8087
Date: May 30, 2007

Please recognize our Customer No. 20277 as our correspondence address.

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SUBSTITUTE APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Subsitute Appeal Brief is submitted in support of the Notice of Appeal of the final rejection of claims 1-20, filed September 1, 2005 and is in response to the Order of the Board of Patent Appeals and Interferences dated April 30, 2007.

I. REAL PARTY IN INTEREST

The real party in interest is MINOLTA CO., LTD.

II. RELATED APPEALS AND INTERFERENCES

Appellants are unaware of any related appeals and interferences.

III. STATUS OF CLAIMS

Claims 1-2, 4-16 and 18-23 are pending in this application and claims 1-2, 4-16 and 18-23 have been finally rejected. It is from the final rejection of claims 1-2, 4-16 and 18-23 that this Appeal has been taken.

IV. STATUS OF AMENDMENTS

No amendment has been filed subsequent to the issuance of the Final Office Action dated September 21, 2005. According to the Advisory Action dated January 26, 2006, the Request for Reconsideration submitted January 12, 2006 was not considered persuasive and, hence, the final rejection of claims 1-2, 4-16 and 18-23 was maintained.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention relates to an image forming apparatus that receives image data from an external device, such as a digital camera, and forms an image as set forth in independent claims 1, 2, 8, 11, 15 and 23, and to a power supply of the invention, i.e. a power supply apparatus as set forth in independent claim 21 and a method of supplying power as set forth in independent claim 23.

Independent claim 1 recites an image forming apparatus (printer **1**, page 9, line 11; Fig 1) to which an external device (**5**; page 9, line 13; Fig. 1) transmitting image data is to be connected. The image forming apparatus comprises:

(i) a detecting unit (**220**; page 10, line 2 to page 12, line 4; Figs. 1 and 3) for detecting whether the external device (**5**) has been connected to the image forming apparatus;

(ii) a printing unit (**210**; page 10, line 1 to page 11, line16; Fig. 1); and

(iii) a control unit (**250**; page 14, line 23 to page 15, line 7 and page 19, lines 10+; Figs 1 and 4).

The detecting unit includes a connector (**221**; page 11, line 26; Fig. 2) configured to receive a plug (**61**; page 11, line 26 to page 12, line 1; Fig. 1) of a cable (**6**; page 12, line 1; Fig. 1) attached to the external device (**5**), and an interface controller (**222**; page 12, line 2 to page 15, line 7; Fig. 2) connected to the connector (**221**). The interface controller (**222**) outputs a first logical level signal (**223** at "1", page 14, line 23 to page 15, line 1; Fig. 2) when the plug (**61**) is inserted into the connector (**221**) and outputs a second logical level signal (**223** at "0", page 14, line 15, lines 1-7; Fig. 2) when the plug (**61**) is not inserted into the connector (**221**).

The control unit controls the printing unit (**210**) in response to the first logical level signal output by the interface controller (**222**) to prepare the printer for image forming data sent from the external device (**5**) via cable (**6**).

Independent claim 2 sets for the elements of claim 1, and further includes a power supply (**240**; page 15, line 25 to page 17, line 2; Figs. 1 and 3) for supplying power to the image forming apparatus.

Independent claim 8 is an image forming apparatus similar to claim 1 in that it comprises:

(i) a detecting unit (**220**; page 10, line 2 to page 12, line 4; Figs. 1 and 3) for detecting whether the external device (**5**) has been connected to the image forming apparatus and

(ii) a control unit a control unit (**250**; page 14, line 23 to page 15, line 7 and page 19, lines 10+; Figs 1 and 4).

However, the apparatus defined by claim 8 also includes an image forming unit for forming an image on a sheet (for example, **213Y**; page 10, lines 7-22, Fig. 1) and a fixing unit (an electric heater) for fixing the image on a sheet by applying heat (**217**; page 18, lines 2-22;

Fig. 1). The control unit controls power supply to the fixing unit (**250**; page 18, lines 4-22; Fig. 1) As in claim 1, the detecting unit includes a connector (**221**; page 11, line 26; Fig. 2) configured to receive a plug (**61**; page 11, line 26 to page 12, line 1; Fig. 1) of a cable (**6**; page 12, line 1; Fig. 1) attached to the external device (**5**), and an interface controller (**222**; page 12, line 2 to page 15, line 7; Fig. 2) connected to the connector (**221**). The interface controller (**222**) outputs a first logical level signal (**223** at "1", page 14, line 23 to page 15, line 1; Fig. 2) when the plug (**61**) is inserted into the connector (**221**). The control unit controls the power to the fixing unit according to whether the interface controller outputs the first logical level signal (**250**; page 18, lines 2-22; Fig. 1). The image data is sent form the external source to the image forming apparatus (**6**; page 9, lines 11-20; Fig 1).

Independent Claim 11 is directed to an image forming apparatus to which is connected an external device transmitting image data. The apparatus comprises:

(i) a fixing unit (**217**; page 18, lines 2-22; Fig. 1),

(ii) a switching unit (**257**; page 18, line 2 to page 19, line 9; page 21, lines 11-16; page 22, lines 15-17; Fig. 4),

(iii) detecting unit (**220**; page 10, line 2 to page 12, line 4; Figs. 1 and 3), and

(iv) a control unit for controlling the switching unit (**250**; Fig. 4).

The detecting unit includes a connector (**221**; page 11, line 26; Fig. 2) configured to receive a plug (**61**, page 11, line 26 to page 12, line 1; Fig. 1) of a cable (**6**; page 12, line 1; Fig. 1) attached to the external device (**5**), and an interface controller (**222**; page 12, line 2 to page 15, line 7; Fig. 2) connected to the connector (**221**). The interface controller (**222**) outputs a first logical level signal (**223** at "1", page 14, line 23 to page 15, line 1; Fig. 2) when the plug (**61**) is inserted into the connector (**221**). The switching unit switches the fixing unit into a fixing mode

(**257**; page 18, line 2 to page 19, line 9; page 21, lines 11-16; page 22, lines 15-17; Fig. 4). The fixing unit is kept at a first temperature for fixing the image on a sheet and switching the fixing unit into a standby mode wherein the temperature is lower than the first temperature (**217**; page 39, lines 2-11; Fig. 1). The switching unit is controlled by the control unit to switch the fixing unit from a standby mode to a fixing mode when the interference controller outputs the first logical level signal (page 18, line 2 to page 19, line 5; Fig. 3) to allow image data to be sent from the external device to the image forming apparatus via the cable (page 39, lines 6-11).

Independent Claim 15 is directed to an image forming apparatus comprising:

(i) a power supply unit to supply power to an external device (**240**; page 15, line 25 to page 17, line 2; Figs. 1 and 3),

(ii) an interface to connect the external device to the image forming apparatus (**220**; page 9, line 23 to page 10, line 10; Fig. 1),

(iii) a judging unit for judging whether a charge (coins) is to be collected (**257**; page 5, lines 22-23; page 43, line 21 to page 46, 22; Figs. 1, 4 and 6),

(iv) a printing unit (**210**; page 10, line 1 to page 11, line 16; Fig. 1),

(v) a control unit for controlling the power supply unit and image forming by the printing unit (**250**; page 21, line 4 to page 23, line 3; Figs. 1 and 4), and

(vi) a charge (coin) collecting unit to collect a fee for image forming and for power supplied to the external device (**3**; page 6, lines 14-16; Figs. 1 and 5).

Image data from the external device is received via the interface (**251**; page 19, lines 18-21; Fig. 4) while power to the external device is supplied by the power supplying unit (**240**; page 39, lines 6-11; Figs. 1 and 3).

Independent Claim 23 is the same as claim 15 and is directed to an image forming apparatus, except that it further includes "wherein" clauses providing for (i) a charge for image forming is collected if image forming is performed without power being supplied to the external device (page 27, lines 12-20), and (ii) a charge for the amount of power that has been supplied to the external device is collected if power is supplied to the external device without image forming being performed by the image forming apparatus (page 27, lines 12-20).

Independent claim 20 is directed to power supply apparatus that supplies power to an external device that transmits image data. The apparatus comprises:

(i) a power supply unit for generating the power that is to be supplied to the external device (**240**; page 15, line 25 to page 17, line 2; Figs. 1 and 3),

(ii) a connector for connecting the external device to the power supply apparatus (**220**; page 9, line 23 to page 10, line 10; Fig. 1),

(iii) a printing unit for forming an image according to the image data from the external device that has been received via the connector (**210**; page 10, line 1 to page 11, line16; Fig. 1); and

(iv) a charge collecting unit for collecting a charge for an amount of the power that has been supplied to the external device (**3**; page 6, lines 14-16; Figs. 1 and 5).

According to the claim, the image data from the external device is received via the connector and the power from the power supplying unit is supplied to the external device via the connector (page 12, lines 5-23; Figs. 1, 2 and 3).

Independent claim 21 is directed to a method of supplying power for a power supply apparatus to which an external device is to be connected. The apparatus includes a printing unit for receiving image data from the external device and forming an image (**210**; page 10, line 1 to

page 11, line 16; Fig. 1) and a power supply apparatus supplying power to the external device (**243**; page 16, line 11 to page 17, line 2; Figs. 1 and 3). The method comprises the steps of:

(i) detecting whether the external device has been connected to the power supply apparatus (**220**; page 10, line 2 to page 12, line 4; Figs. 1 and 3),

(ii) judging whether the power is to be supplied to the external device or whether an image is to be formed according to the image data from the external device (**257**; page 5, lines 22-23; page 43, line 21 to page 46, 22; Figs. 1, 4 and 6),

(iii) supplying power to the external device when the judging step has judged that the power is to be supplied to the external device (**240**; page 15, line 25 to page 17, line 2; page 20, line 16 to page 17, line 3; Figs. 1 and 4);

(iv) forming an image when the judging step has judged that the image is to be formed (page 40, line 26 to page 41, line 21; Figs. 15 and 16); and

(v) collecting a charge for an amount of the power that has been supplied by the power supply apparatus and a charge, separate from the charge for the amount of the power that has been supplied, for image forming by the printing unit (**3**; page 6, lines 14-16; page 27, lines 12-20; Figs. 1 and 5).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

i) Whether claims 1 and 2 are unpatentable under 35 U.S.C. § 103 for obviousness predicated upon Stephenson (USPN 5,757,388), filed December 16, 1996 and issued on May 26, 1998 in view of Amoni [et al.] (USPN 5,884,086), filed April 15, 1997 and issued on March 16, 1999.

ii) Whether claim 4-9 and 11-14 are unpatentable under 35 U.S.C. § 103 for obviousness predicated upon Stephenson (USPN 5,757,388) in view of Amoni [et al.] (USPN 5,884,086) and Yokoyama (USPN 5,694,226) filed June 20, 1995 and issued December 2, 1997.

iii) Whether claim 10 is unpatentable under 35 U.S.C. § 103 for obviousness predicated upon Stephenson (USPN 5,757,388) in view of Amoni [et al.] (USPN 5,884,086), Yokoyama (USPN 5,694,226) and Kawai [et al.] (USPN 5,805,780) filed May 25, 1994 and issued on September 8, 1998.

iv) Whether claims 15, 16 18, 19 and 23 are unpatentable under 35 U.S.C. § 103 for obviousness predicated upon Stephenson (USPN 5,757,388) in view of Amoni [et al.] (USPN 5,884,086), Kawai [et al.] (USPN 5,805,780), Meese [et al.] (USPN 4,532,418) filed December 21, 1984 and issued on July 30, 1985 and ***In re Larson***, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965).

v) Whether claims 20-22 are unpatentable under 35 U.S.C. § 103 for obviousness predicated upon Stephenson (USPN 5,757,388) in view of Amoni [et al.] (USPN 5,884,086), Kawai [et al.] (USPN 5,805,780) and Meese [et al.] (USPN 4,532,418).

VII. ARGUMENT

Patentability of independent claims 1, 2, 8, 11, 15, 20, 21 and 23 over the applied prior art references

In the invention recited in independent claim 1, a printer initiates a preparatory operation involving the printer when a camera has been connected to the printer. In this regard, the Examiner indicates that Stephenson (USPN 5,757,388) discloses the control unit of claim 1 (see p. 8, lines 4-10 of the Final Office Action dated September 21, 2005).

However, Stephenson states that, "It is advantageous for the camera 10 and the ink jet printer 12 to indicate the change in camera display 18 from a display to a data transmission mode. This is accomplished by a sensor on the camera detecting printer presence" (see col. 3, line 65 to col. 4, line 1 of Stephenson). Stephenson discloses that a preparatory operation involving the camera display 18 is performed according to the output from an interface controller.

Even when the description at column 4, lines 1-6 of Stephenson [Timing signals transmitted through active socket 20 and active latch 24 are used to synchronize display modulation and the printer data reception. Active latch 24 is used to signal start of transmission. Transmission can be synchronized by embedding timing signals into the camera display signal.] is considered, Stephenson does **NOT** disclose a structure for performing a preparatory operation involving a printer (a control unit for controlling ... the printing unit so as to prepare for image forming), as in the invention recited in claim 1. Furthermore, Stephenson discloses that the ***camera*** performs the preparatory operation ***according to the output from the interface controller***, and does not disclose a structure for a ***printer*** performing a preparatory operation, as in the present invention.

On the other hand, Stephenson states in relation to printer operations that, "The operator signals the start of printing using printer electronics 30" (see col. 3, line 44 of Stephenson). Using active latch 24 to signal start of ***transmission*** is not consistent with the fact that it is the operator that signals the start of printing using printer electronics 30. Thus, ***the printer operations are clearly performed as a result of instructions input by an operator, and not according to output from an interface controller.*** Amoni [et al.] does not disclose this feature

also as the Examiner relies upon Amoni [et al.] as disclosing transmitting digital data directly through the use of a directly connected cable.

Accordingly, Stephenson and Amoni [et al.] do not disclose the control unit of the present invention, and a person of ordinary skill in the art would not have found the present invention obvious over Stephenson and Amoni, considered alone or in combination.

Regarding the invention recited in independent claim 2, the Examiner indicates that in Stephenson, power supply to the printer is controlled according to the output from an interface controller (see p. 10, line 27 to p. 11, line 2 of the Final Office Action dated September 21, 2005).

However, there is no specific disclosure of a power supplying unit in Stephenson, or that power ***to the printing unit*** is supplied by such specific power supplying unit according to whether the interface controller outputs the first logical level signal or the second logical level signal. Stephenson merely discloses that a latch driver 26 permits the securing and release of the camera (see col. 2, line 60-64 of Stephenson). This portion of Stephenson is simply directed toward preventing the camera from being removed while the printer receiver device 32 is reading the camera display, and has absolutely nothing to do with power supply. In Stephenson, printer operations are performed as a result of an input instruction from an operator, as mentioned above. Since there is no specific disclosure in Stephenson regarding a specific power supplying unit supplying power to the printing unit, it can realistically be presumed also that power to the printer is supplied according to whether an ON/OFF switch for a power supply of the printer is turned ON. Accordingly, independent claim 2 is patentable over Stephenson and Amoni [et al.] as they do not disclose or suggest the control unit of the invention recited in independent claim 2.

Independent claim 8 requires a control unit for controlling power supplying to the fixing unit according to whether the interface controller outputs the first logical level signal or the second logical level signal and independent claim 11 requires a control unit for controlling the switching unit (for the fixing unit) so as to switch the fixing unit from the standby mode to the fixing mode when the interface controller outputs the first logical level signal. As noted above, in Stephenson, no specific power supplying unit is disclosed for either a printing unit and/or a fixing unit, but printer operations are performed as a result of an input instruction from an operator.

It should be noted that since Stephenson discloses an inkjet printer, a fixing device is not provided and consequently, there is absolutely no need to perform a preparatory operation that takes time and which is required in the present invention.

Thus, there is no disclosure in Stephenson of a control unit for controlling power supplying to the fixing unit according to whether the interface controller outputs the first logical level signal or the second logical level signal (claim 8) or a control unit for controlling a switching unit so as to switch the fixing unit from the standby mode to the fixing mode when the interface controller outputs the first logical level signal (claim 11). Yokoyama is relied upon by the Examiner as disclosing a fixing unit, but does not disclose or suggest the specific function recited for the control units of claims 8 and 11. Furthermore, since Stephenson discloses an inkjet printer, there is no reasonable basis as to why a person of ordinary skill in the art would ever look to the fixing unit of Yokoyama to be used in Stephenson. The fact that the Examiner suggest such combination is evidence of the fact that the present rejection is an example of improper reconstruction of the claimed invention using the present disclosure as a guide.

Accordingly, independent claims 8 and 11 are patentable over Stephenson, Amoni and Yokoyama as they do not disclose or suggest the control unit of the invention recited in independent claims 8 and 11, In addition, the only apparent motivation of record for the proposed modification of the arrangement of Stephenson using the fixing unit of Yokoyama to arrive at the claimed inventions is found in Applicants' disclosure which, of course, may not properly be relied upon to support the ultimate legal conclusion of obviousness under 35 U.S.C. §103. ***Panduit Corp. v. Dennison Mfg. Co.***, 810 F.2d 1561, 227 1 USPQ2d 1593 (Fed. Cir. 1987)..

Regarding the invention recited in independent claims 15 (a charge collecting unit for collecting a charge ... for an amount of the power that has been supplied to the external device), independent claim 20 (a charge collecting unit for collecting a charge for an amount of the power that has been supplied to the external device), independent claim 21 (a charge collecting step for collecting a charge for an amount of the power that has been supplied by the power supply apparatus) and independent claim 23 (a charge for the amount of power that has been supplied to the external device is collected if power is supplied to the external device without image forming being performed by the image forming apparatus), the Examiner relies upon the electric vehicle related invention of Meese [et al.], stating that it would have been obvious to combine the electric vehicle related invention Meese [et al.] with Stephenson, Amoni and Kawai [et al.] to meet the terms of the claims.

However, Meese [et al.] relates to ***a charging meter and method for electric vehicles***, permitting charging of an electric vehicle at a parking location in response to use of a charge card and storing charging and parking information for subsequent retrieval to facilitate billing to the owner of the charge card. In contrast, the invention recited in independent claim 23 is directed to an image forming apparatus that includes a charge collecting unit for collecting a

charge for an amount of power that has been supplied to an external device (transmitting image data) connected to the image forming apparatus.

Meese [et al.] is clearly directed to a nonanalogous art as that of the other applied references, as well as that of the inventions recited in independent claims 15, 20, 21 and 23. ***In re Clay***, 966 F.2d 656, 23 USPQ2d 1058 (Fed. Cir. 1992); ***Ex parte Dussaud***, 7 USPQ2d 1818 (BPAI 1988). Accordingly, it cannot be said that one having ordinary skill in the relevant art would have been charged with knowledge of Meese [et al.].

The Examiner contends that Meese [et al.] is reasonably pertinent to a particular problem with which Applicants were concerned, namely the collection of money in exchange for the provision of electricity.

However, this expression of the particular problem is too expansive. Supplying of electricity in exchange for money in one art does not mean a person of ordinary skill in the art would appreciate that such feature could be modified and applied to a nonanalogous art. If this is the case, ***it should be a simple matter for the Examiner to cite a reference*** that evinces that a person of ordinary skill in the art would have applied the ***charging meter and method for electric vehicles*** of Meese [et al.] to charging for power supplied to an external device connected to an image forming unit where the power is supplied via a power supplying unit of the image forming device. No such reference has been cited by the Examiner.

The Examiner should recognize that even if the prior art *could* be modified so as to result in the combination defined by the claims, the modification would not have been obvious unless the prior art suggested the desirability of the modification. ***In re Deminski***, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986). In the absence of such a prior art suggestion for modification of the

references, the basis of the rejection is no more than inappropriate hindsight reconstruction using Appellants' claims as a guide. ***In re Warner***, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967).

Since neither Stephenson, Amoni [et al.] nor Kawai [et al.] disclose or suggest adapting (using) the charging meter and method for electric vehicles disclosed in Meese [et al.] to an image forming unit to which a camera (transmitting image data) is connected, the requisite motivation required to establish a *prima facie* case of obviousness is nonexistent. Therefore, the Examiner's rejections of independent claims 15, 10, 21 and 23 are an example of the use of impermissible hindsight considerations to reject the claims.

VIII. CONCLUSION

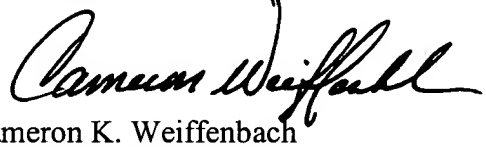
It should, therefore, be apparent that the Examiner did not establish a *prima facie* basis to deny patentability to the claimed inventions. Based upon the foregoing, Appellants, therefore, submit that the imposed rejections under 35 U.S.C. § 103(a) of claims 1 and 2 as being unpatentable over Stephenson in view of Amoni [et al.], of claims 4-9 and 11-14 as being unpatentable over Stephenson in view of Amoni [et al.] and Yokoyama , of claim 10 as being unpatentable over Stephenson in view of Amoni [et al.], Yokoyama and Kawai [et al.], of claims 15, 16, 18, 19 and 23 as being unpatentable over Stephenson in view of Amoni [et al.], Kawai [et al.], Meese [et al.] and ***In re Larson***, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965), and of claims 20-22 as being unpatentable over Stephenson in view of Amoni [et al.], Kawai [et al.] and Meese [et al.] should not be sustained as the Examiner has not established a *prima facie* case of obviousness.

To the extent necessary, a petition for an extension of time under 37 CFR § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper,

including extension of time fees, to Deposit Account and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP



Cameron K. Weiffenbach
Registration No. 44,488

600 13th Street, N.W.
Washington, DC 20005-3096
Phone: 202.756.8000 CKW:ckw
Facsimile: 202.756.8087
Date: May 30, 2007

Please recognize our Customer No. 20277 as our correspondence address.

CLAIMS APPENDIX

1. (On Appeal) An image forming apparatus to which an external device transmitting image data is to be connected, the image forming apparatus comprising:

a detecting unit for detecting whether the external device has been connected to the image forming apparatus, the detecting unit including

a connector configured to receive a plug of a cable attached to the external device, and

an interface controller connected to the connector, the interface controller outputting a first logical level signal when the plug is inserted into the connector and outputting a second logical level signal when the plug is not inserted into the connector;

a printing unit; and

a control unit for controlling, in response to the first logical level signal output by the interface controller, the printing unit so as to prepare for image forming according to the image data from the external device, wherein

the image data is set from the external device to the image forming apparatus via the cable.

2. (On Appeal) An image forming apparatus comprising:

a detecting unit for detecting an external device, the external device transmitting image data, the detecting unit including

a connector configured to receive a plug of a cable attached to the external device, and

an interface controller connected to the connector, the interface controller outputting a first logical level signal when the plug is inserted into the connector and outputting a second logical level signal when the plug is not inserted into the connector;

a power supplying unit for supplying power;

a printing unit that is driven by the power from the power supplying unit and forms an image according to the image data from the external device; and

a control unit for controlling the power supplying to the printing unit by the power supplying unit according to whether the interface controller outputs the first logical level signal or the second logical level signal, wherein

the image data is set from the external device to the image forming apparatus via the cable.

4. (On Appeal) The image forming apparatus according to Claim 2, wherein the printing unit includes:

an image forming unit for forming the image on a sheet according to the image data; and

a fixing unit for fixing the image on the sheet by applying heat.

5. (On Appeal) The image forming apparatus according to Claim 4, wherein

the control unit controls an amount of the power supplied to the fixing unit so as to change the power amount according to whether the interface controller outputs the first logical level signal or the second logical level signal.

6. (On Appeal) The image forming apparatus according to Claim 4, wherein the control unit controls an amount of the power supplied to the fixing unit so as to keep the fixing unit at a first temperature that is lower than a second temperature for fixing the image on the sheet when the interface controller outputs the second logical level signal, and at the second temperature when the interface controller outputs the first logical level signal.

7. (On Appeal) The image forming apparatus according to claim 2, wherein the control unit controls the power supplying to the printing unit when the interface controller outputs the first logical level signal.

8. (On Appeal) An image forming apparatus to which an external device transmitting image data is to be connected, the image forming apparatus comprising:

a detecting unit for detecting whether the external device has been connected to the connector, the detecting unit including

a connector configured to receive a plug of a cable attached to the external device, and

an interface controller connected to the connector, the interface controller outputting a first logical level signal when the plug is inserted into the connector;

an image forming unit for forming an image on a sheet according to the image data that has been transmitted from the external device;

a fixing unit for fixing the image on the sheet by applying heat, wherein the fixing unit is an electric heater; and

a control unit for controlling power supplying to the fixing unit according to whether the interface controller outputs the first logical level signal or the second logical level signal, wherein

the image data is set from the external device to the image forming apparatus via the cable.

9. (On Appeal) The image forming apparatus according to Claim 8, wherein the external device is a camera for taking a picture and generating the image data, the external device including a connecting unit that is to be connected to the connector.

10. (On Appeal) The image forming apparatus according to Claim 8, further comprising a fee-charging unit for charging a user a fee for forming an image.

11. (On Appeal) An image forming apparatus to which an external device transmitting image data is to be connected comprising:

a fixing unit for fixing an image that has been formed on a sheet by applying heat;

a switching unit for putting the fixing unit into a fixing mode, in which the fixing unit is kept at a first temperature for fixing the image on the sheet, and a standby mode, in which the fixing unit stands by and a temperature of the fixing unit is lower than the first temperature;

an external device detecting unit for detecting whether the external device has been connected to the image forming apparatus, the external device detecting unit including

a connector configured to receive a plug of a cable attached to the external device, and

an interface controller connected to the connector, the interface controller outputting a first logical level signal when the plug is inserted into the connector; and

a control unit for controlling the switching unit so as to switch the fixing unit from the standby mode to the fixing mode when the interface controller outputs the first logical level signal, wherein

the image data is set from the external device to the image forming apparatus via the cable.

12. (On Appeal) The image forming apparatus according to Claim 11, wherein the switching unit interrupts a current to the fixing unit in the standby mode.

13. (On Appeal) The image forming apparatus according to Claim 11, wherein the switching unit keeps the fixing unit at a second temperature, which is lower than the first temperature, in the standby mode.

14. (On Appeal) The image forming apparatus according to claim 11, further comprising a judging unit for judging whether an image forming operation has been completed, wherein

the control unit controls the switching unit so as to switch the fixing unit from the fixing mode to the standby mode when the interface controller outputs the second logical level signal and when the judging unit judges that the image forming operation has been completed.

15. (On Appeal) An image forming apparatus, comprising:

a power supplying unit for generating power that is to be supplied to an external device transmitting image data;

an interface for connecting the external device to the image forming apparatus, wherein the image data from the external device is received via the interface and the power from the power supplying unit is supplied to the external device via the interface;

a judging unit for judging whether a charge is to be collected;

a printing unit;

a control unit for controlling power supplying by the power supplying unit and image forming by the printing unit according to a judging result from the judging unit, wherein the control unit has the printing unit form an image according to the image data from the external device that has been received via the interface; and

a charge collecting unit for collecting a charge for the image forming and a charge, separate from the charge for the image forming, for an amount of the power that has been supplied to the external device.

16. (On Appeal) The image forming apparatus according to Claim 15, wherein the control unit has the printing unit form the image and has the power supplying unit supply the power when the judging unit judges that the charge is to be collected.

18. (On Appeal) The image forming apparatus according to Claim 15, wherein the charge collecting unit includes a handling unit into which money is input, the handling unit

accumulating the input money, wherein the judging unit judges that the charge is to be collected when money has been input into the handling unit.

19. (On Appeal) The image forming apparatus according to Claim 18, wherein

the handling unit includes first and second handling units, and

the control unit permits the image forming when money has been input into the first handling unit and permits the power supplying when money has been input into the second handling unit.

20. (On Appeal) A power supply apparatus that supplies power to an external device that transmits image data comprising:

a power supplying unit for generating the power that is to be supplied to the external device;

a connector for connecting the external device to the power supply apparatus, wherein the image data from the external device is received via the connector and the power from the power supplying unit is supplied to the external device via the connector;

a printing unit for forming an image according to the image data from the external device that has been received via the connector; and

a charge collecting unit for collecting a charge for an amount of the power that has been supplied to the external device.

21. (On Appeal) A method of supplying power for a power supply apparatus to which an external device is to be connected, the power supply apparatus including a printing unit for receiving image data from the external device and forming an image, the power supply apparatus supplying power to the external device, the power supplying method comprising:

a connection detecting step for detecting whether the external device has been connected to the power supply apparatus;

a judging step for judging one of that the power is to be supplied to the external device which has been connected to the power supply apparatus and that the image is to be formed according to the image data from the external device;

a power supplying step for supplying the power to the external device when the judging step has judged that the power is to be supplied to the external device;

an image forming step where the printing unit forms the image when the judging step has judged that the image is to be formed; and

a charge collecting step for collecting a charge for an amount of the power that has been supplied by the power supply apparatus and a charge, separate from the charge for the amount of the power that has been supplied, for image forming by the printing unit.

22. (On Appeal) The power supplying method according to Claim 21, wherein it is judged that money has been put for one of power supplying and image forming at the judging step.

23. (On Appeal) An image forming apparatus, comprising:

a power supplying unit for generating power that is to be supplied to an external device transmitting image data;

an interface for connecting the external device to the image forming apparatus, wherein the image data from the external device is received via the interface and the power from the power supplying unit is supplied to the external device via the interface;

a judging unit for judging whether a charge is to be collected;

a printing unit;

a control unit for controlling power supplying by the power supplying unit and image forming by the printing unit according to a judging result from the judging unit, wherein the control unit has the printing unit form an image according to the image data from the external device that has been received via the interface; and

a charge collecting unit for collecting a charge for the image forming and a charge for an amount of the power that has been supplied to the external device, wherein

a charge for image forming is collected if image forming is performed without power being supplied to the external device, and

a charge for the amount of power that has been supplied to the external device is collected if power is supplied to the external device without image forming being performed by the image forming apparatus.

EVIDENCE APPENDIX

NONE

RELATED PROCEEDINGS APPENDIX

NONE